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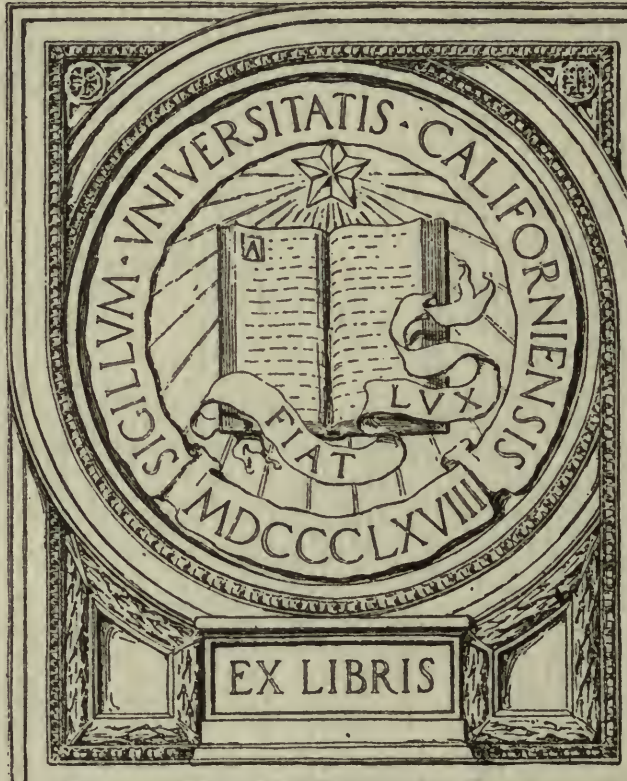

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PAT. JAN. 24, 1908

UNITED STATES SHIPPING BOARD
EMERGENCY FLEET CORPORATION

TIMBER SCHEDULE AND SPECIFICATIONS

FOR

STANDARD WOOD STEAMSHIP

GULF AND ATLANTIC COAST

LARGELY SOUTHERN YELLOW PINE

REVISED JANUARY 1, 1918

23 REVISED

SUPERSEDES NO. 18

WASHINGTON
GOVERNMENT PRINTING OFFICE
1918

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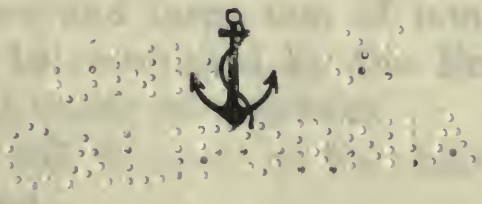

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UNITED STATES SHIPPING BOARD
EMERGENCY FLEET CORPORATION

TIMBER SCHEDULE AND
SPECIFICATIONS

FOR

STANDARD WOOD STEAMSHIP

GULF AND ATLANTIC COAST

LONGLEY SOUTHERN YELLOW PINE

GIFT

REVISED JANUARY 1, 1918

23 REVISED

Supersedes No. 12

WASHINGTON
GOVERNMENT PRINTING OFFICE
1918

TIMBER SCHEDULE AND SPECIFICATIONS

FOR

STANDARD WOOD STEAMSHIP, GULF AND ATLANTIC COAST.

GENERAL INFORMATION.

This schedule has been drafted for the information and guidance of lumber mills, contractors, and shipbuilders, and constitutes the official schedule of timbers to be used in the construction of wooden vessels on the Gulf and Atlantic coasts. It does not, however, definitely define the exact number of timbers nor the exact amount of board feet that will be required to build a standard wood steamship. Builders may find it necessary to purchase additional items in order to complete the construction of the vessel to requirements of the Classification Society.

The purchase and inspection of lumber under this schedule will be conducted by the Emergency Fleet Corporation or under its direction.

Inspections will be made at the mills where lumber is manufactured.

Approved January 1, 1918.

UNITED STATES SHIPPING BOARD
EMERGENCY FLEET CORPORATION,
CHARLES PIEZ,
Vice President and General Manager.

369992

RULES GOVERNING TIMBER SCHEDULE.

The accompanying lumber schedule is governed strictly by the following rules:

1. Dimensions of timbers in the form to be used in the ship are net, after surfacing. Material must be sawed large enough to surface down to these dimensions. Dimensions and quantities in the rough, in accordance with the usual milling practice, are given separately for the information of manufacturers.

2. The specification of "Dense merchantable" longleaf yellow pine means the following, as quoted from the January 1, 1917, grading rules issued by the Southern Pine Association.

"All merchantable timbers shall be well manufactured and shall be free from defects such as injurious ring and round shakes and through shakes that extend to the surface, unsound and loose knots, and knots in groups that will materially impair the strength. Seasoning checks and sap stain shall not be considered defects.

"Sizes under 9 inches on the largest dimension shall show two-thirds or more heart surface on one of the wide faces; sizes 9 inches and over on the largest dimension shall show two-thirds or more heart on both of the wide faces. When sticks are square the face showing the most heart shall govern the inspection on sizes under 9 inches and the two faces showing the most heart shall govern the inspection when 9 inches and over. Heart showing the full length, even if not two-thirds of the area as above, shall meet the requirements of this quality.

"Wane not exceeding one-eighth of the dimension of the face and one-quarter of the length of the piece on

one corner, or the equivalent on two or more corners on not to exceed 10 per cent of the pieces, shall be admitted.

"Dense southern yellow pine shall show on either end an average of at least six annual rings per inch and at least one-third summer wood, or else the greater number of the rings shall show at least one-third summer wood, all as measured over the third, fourth, and fifth inches of a radial line from the pith. Wide-ringed material excluded by this rule will be acceptable, provided that the amount of summer wood as above measured shall be at least one-half.

"The contrast in color between summer wood and spring wood shall be sharp and the summer wood shall be dark in color, except in pieces having considerably above the minimum requirement for summer wood.

"In cases where timbers do not contain the pith, and it is impossible to locate it with any degree of accuracy, the same inspection shall be made over 3 inches on an approximate radial line beginning at the edge nearest the pith in timbers over 3 inches in thickness and on the second inch (on the piece) nearest to the pith in timbers 3 inches or less in thickness.

"In dimension material containing the pith but not a 5-inch radial line, which is less than 2 by 8 inches in section or less than 8 inches in width, that does not show over 16 square inches on the cross section, the inspection shall apply to the second inch from the pith. In larger material that does not show a 5-inch radial line the inspection shall apply to the 3 inches farthest from the pith.

"The radial line chosen shall be representative. In case of disagreement between purchaser and seller, the average summer wood and number of rings shall be the average of the two radial lines chosen."

3. Items 29, 97, 99, 102, 106, 107, 108, 110, 111, 112, 115, 118, 122, 123, 134, and 136 are to be furnished under the density rule, but one wide face of every piece must be all heart, free of wane. All these tim-

bers except item 29 must show on edges adjoining the heart face 85 per cent heart the full length of stick, which may be reduced to three-fourths of the length for item 29.

4. The specifications governing yellow pine grades No. 1 common, A edge grain flooring, and A finish are given in the Standard Specifications for Grades of Southern Yellow Pine Lumber issued by the Southern Pine Association April 1, 1917.

5. Cypress timbers shall be equivalent in grade to No. 1 common. The specifications governing cypress grades are given in the Standard Grades and Classifications of the Southern Cypress Manufacturers' Association, edition of January 1, 1917.

6. Oak items, unless otherwise specified, shall be selected stock from the grade of construction oak timbers. The specifications governing oak grades are given in Association Standard Grades issued by the Hardwood Manufacturers' Association of the United States October 1, 1915.

7. Knees shall be free from rot, heart, or ring shake, large or loose knots, and other defects which would impair their strength for the purpose intended. They must be natural crooks.

8. Treenails shall be of clear all-heart wood, straight grained, and thoroughly air dried.

9. Unsurfaced items 40 feet long and over and 18 by 18 inches and over may be furnished by the mills either hewn or sawed. If furnished hewn, such items shall run a full inch over the specified size and be square edged and of uniform size throughout.

Items 145, 146, 147, 148, 149, 150, and 151, oak timbers, may be furnished by the mills either hewn or sawed. If furnished hewn, they shall run a full inch

over the specified size and be square edged and of uniform size throughout.

10. Any finished timbers in this schedule which shipbuilders may desire to have furnished rough, gross size, may be furnished that way by mutual arrangement with the mills designated to saw the timbers.

11. The frame timbers to be either square edged or flitches, provided that the specified width is obtained at the narrowest point inside of the bark, except where templets are used as provided for in rule 16.

12. All timbers that are furnished rough can be put into ships unsurfaced except as regards necessary surfacing to make a good workmanlike job in the fitting of the timbers and the surfacing that would be brought about by having to shape the timbers.

13. *Substitutions.*—Any yellow-pine items can be furnished in real white oak or live oak of the sizes as specified. Any of the larger sized yellow-pine timbers may be furnished in fir if desired, in the same sizes as shown in this schedule.

Items specified to be furnished in white oak can be furnished in live oak or greenheart, but not in fir or yellow pine, except that the keel shoe may be of gum or other material approved by the American Bureau of Shipping.

The frames may be furnished in red swamp cypress in the same sizes as given in the schedule. Red swamp cypress may also be substituted for the aprons, deadwoods, hooks, and pointers in the same sizes as given in the schedule. These are items 7, 10, 12, and 125.

14. Firms which do not have facilities for manufacturing finished treenails, but which wish to supply rough lumber from which treenails may be made by ship-

building firms, may find the following suggestions helpful:

Treenails, finished size 1¼ by 26 inches, can be manufactured from 1½ by 1½ by 26 inches rough dimension stock. Amount of lumber in each piece is 0.405 board foot.

Treenails, finished size 1⅜ by 32 inches, can be made from 1½ by 1½ by 32 inches rough dimension stock, each piece containing ½ board foot.

Treenails, finished size 1⅜ by 36 inches, can be made from 1½ by 1½ by 36 inches rough dimension stock, each piece containing 0.562 board foot.

15. In view of portions of certain of the timbers being cut away by shaping, scarfs, etc., the following defects may be allowed, in the discretion of the owner's timber inspector:

Item 4. *Knightheads:* These can have 12 inches of wane the entire length of one corner or any other defect that will work out.

Item 5. *Stem:* Wane or any other defect anywhere in the piece that will work out when timber is shaped will be allowed.

Items 23, 26, and 27. *Hatch strong backs:* These can have wane the entire length on two corners or any other defect that will work out when timber is shaped.

Item 32. *Clamp timbers:* 2,400 linear feet of these can have 5 inches of wane the entire length on one corner or any other defect that will work out when timber is shaped. Splits, shakes, or any other defects in the end that will work out in the scarf will be allowed.

Items 31 and 56. *Bilge ceiling:* 2 inches of wane or other defects that will work out will be allowed on two

corners or sides on 600 linear feet of item No. 31 and 400 linear feet of item No. 56.

Items 41 to 52. *Upper deck beams:* Wane or any other defect will be allowed that will work out when the timber is shaped to 14 inches in width or as shown by plan of typical midship beam. In this connection it may be stated that items 41 to 51, inclusive, have the same camber in proportion to their length beginning at the center as item No. 52.

Items 77 and 78. *Hatch coamings:* These can have wane on one corner the entire length or any other defect that will work out.

Items 18, 19, 29, 31, 32, 34, 56, 57, 64, 65, 69, 70, and 76 will allow wane, splits, shakes, or any other defects that will work out on half splice or scarfs.

16. It is desirable to use natural crooks as much as possible for curved timbers, and the dimensions of a number of the frame timbers can be considerably reduced by their use. To assist in this work templets showing the shape of the finished timber can be employed. Templets should be large enough to allow for the bevel of the frames. The detail frame plan will show the shape of the frame timbers, and the difference between the net size and the mill size there specified will show the amount to be added to the width as drawn to obtain the necessary width of the templet. Unless the templets are furnished by the shipbuilder they should be used only as a general guide in the selection of the timbers. All shipbuilders are to furnish the mills with paper templets, showing the finished size of flitches, 20 inches and wider. The width for invoicing shall be obtained by measuring the width on both faces at the mid length, adding together and dividing by two.

17. If the bilge planking is not edge bolted and the bilge frames are sawed out of wide flitches instead of being cut from natural crooks, filling floors will have to be fitted at the bilges in accordance with drawing 373 No. 18A. The edge bolting of the planks is preferred.

18. All timbers must be marked with paint on ends with the item number.

19. Short timbers may be furnished in multiples if the pieces are properly marked. Thus, a 14-foot piece for two 35A items should be marked 35A2, a 16-foot piece for one 35E and one 35G item should be marked 35E&G.

20. The dressed side of planking shall be the sap side and the heart side is to be placed against the frames.

Timber schedule for standard wood steamship—Gulf and Atlantic coast.

Item.	Item prices.	Part.	Net size.	Gross size.	Linear feet.	Length.	Number of pieces.	Gross footage.	Finish.	Species and grade.
			Inches.	*Inches.*		*Feet.*		*Ft. b. m.*		
1	$36.50	Rudder blade	.....	16x18	.....	20	1	480	Rough	Long leaf yellow pine, dense merchantable.
2	41.06	.....do	.....	16x18	.....	26	1	624	Rough	Do.
3	91.25	Hull end framing	.....	12x24	240	16 to 32 av., 24	10	5,760	Rough	Do.
4	91.25	Knightheads	.....	16x24	.....	40	2	2,560	Rough	Do.
5	91.25	Stem	.....	16x20	.....	44	1	1,173	Rough	Do.
6	38.32	Rudder blade	.....	16x16	.....	28	1	597	Rough	Do.
7	51.10	Apron	.....	16x18	.....	44	2	2,112	Rough	Do.
8	68.43	Rudder blade	.....	16x22	.....	22	1	645	Rough	Do.
9	91.25	Hull end framing	.....	12x22	120	16 to 32 av., 24	5	2,640	Rough	Do.
10	31.94	Forward deadwood	.....	14x16	.....	20	9	3,360	Rough	Do.
11	31.94	Hold beams	.....	14x16	.....	20	2	747	Rough	Do.
12	34.67	After deadwood	.....	14x16	.....	22	9	3,696	Rough	Do.
13	38.32	Hold beams	.....	14x16	.....	30	2	1,120	Rough	Do.
14	41.97	.....do	.....	14x16	.....	36	2	1,344	Rough	Do.
15	45.62	.....do	.....	14x16	.....	40	2	1,493	Rough	Do.
16	48.36	.....do	.....	14x16	.....	42	2	1,568	Rough	Do.
17	51.10	.....do	.....	14x16	.....	44	46	37,780	Rough	Do.
18	51.10	Keel	.....	14x16	.....	44	3	2,464	Rough	Do.
19	54.75	.....do	.....	14x16	.....	48	4	3,584	Rough	Do.
20	27.37	Stern framing	.....	14x14	.....	10	34	5,553	Rough	Do.

21	31.94	Rudder blade	.....	14x16	.....	12	1	224	Rough	Do.
22	27.37	Girder timbers and hatch coamings.	13¾x13¾	14x14	.....	16	8	2,091	S4S	Do.
23	29.20	Hatch strongbacks	13¾x13¾	14x14	.....	17	2	555	S4S	Do.
24	27.37	Stern framing	.....	14x14	.....	18	34	9,996	Rough	Do.
25	.....	(Omitted.)								
26	31.02	Hatch strongback	13¾x13¾	14x14	.....	21	1	343	S4S	Do.
27	31.94	.....do	13¾x13¾	14x14	.....	25	1	408	S4S	Do.
28	.....	(Omitted.)								
29	45.59	Upper deck waterway	.....	14x14	1,400	24 to 40 av., 32	.....	22,867	Rough	Long leaf yellow pine, dense (see rule 3).
30	35.59	Girder timbers and hatch coamings.	13¾x13¾	14x14	1,400	24 to 40 av., 32	.....	22,867	S4S	Long leaf yellow pine, dense merchantable.
31	35.59	Bilge ceiling	.....	14x14	2,000	24 to 40 av., 32	.....	32,667	Rough	Do.
32	42.89	Clamp timbers	13¾x13¾	14x14	3,600	30 to 50 av., 40	.....	58,800	S4S	Do.
33A	31.94	Engine foundation keelsons.	13¾x13¾	14x14	.....	24	2	784	S4S	Do.
33B	31.94	.....do	13¾x13¾	14x14	.....	28	2	915	S4S	Do.
33C	38.32	.....do	13¾x13¾	14x14	.....	30	11	5,389	S4S	Do.
33D	41.97	.....do	13¾x13¾	14x14	.....	36	1	588	S4S	Do.
33E	45.62	.....do	13¾x13¾	14x14	.....	45	1	735	S4S	Do.
33F	31.94	.....do	9¾x13¾	10x14	.....	24	2	560	S4S	Do.
34	50.19	Main keelsons	13¾x13¾	14x14	.....	48	56	43,904	S4S	Do.
36	.....	(Omitted.)								
35A	100.00	Frames	.....	12x34	.....	7	2	476	Rough	Long leaf yellow pine, dense merchantable (see rule 19).

Timber schedule for standard wood steamship—Gulf and Atlantic coast—Continued.

Item.	Item prices.	Part.	Net size.	Gross size.	Linear feet.	Length.	Number of pieces.	Gross footage.	Finish.	Species and grade.
			Inches.	*Inches.*		*Feet.*		*Ft. b. m.*		
35B	$100.00	Frames		12x32			22	5,632	Rough	Long leaf yellow pine, dense merchantable (see rule 19).
35C	100.00	do		12x32		9	10	2,880	Rough	Do.
35D	90.00	do		12x30		6	78	14,040	Rough	Do.
35E	90.00	do		12x30		7	6	1,260	Rough	Do.
35F	90.00	do		12x30		8	44	10,560	Rough	Do.
35G	90.00	do		12x30		9	22	5,940	Rough	Do.
35H	90.00	do		12x30		10	16	4,800	Rough	Do.
35I	90.00	do		12x30		11	10	3,300	Rough	Do.
35J	82.25	do		12x28		6	24	4,032	Rough	Do.
35K	82.25	do		12x28		8	76	17,024	Rough	Do.
35L	82.25	do		12x28		9	82	20,664	Rough	Do.
35M	82.25	do		12x28		10	6	1,680	Rough	Do.
35N	82.25	do		12x28		11	16	4,928	Rough	Do.
35O	82.25	do		12x28		15	16	6,720	Rough	Do.
35P	79.50	do		12x26		9	30	7,020	Rough	Do.
35Q	79.50	do		12x26		11	12	3,432	Rough	Do.
35R	79.50	do		12x26		12	14	4,368	Rough	Do.
35S	79.50	do		12x26		14	6	2,184	Rough	Do.
35T	77.50	do		12x24		9	20	4,320	Rough	Do.
35V	77.50	do		12x24		10	8	1,920	Rough	Do.
35W	77.50	do		12x24		12	18	5,184	Rough	Do.

35X	77.50	do		12x24	13	8	2,496	Rough	Do.
35Y	77.50	do		12x24	14	16	5,376	Rough	Do.
35Z	82.25	do		12x24	19	12	5,472	Rough	Do.
37A	69.50	do		12x22	8	8	1,408	Rough	Do.
37B	69.50	do		12x22	9	16	3,168	Rough	Do.
37C	69.50	do		12x22	10	6	1,320	Rough	Do.
37D	69.50	do		12x22	12	18	4,752	Rough	Do.
37E	69.50	do		12x22	14	22	6,776	Rough	Do.
37F	69.50	do		12x22	16	8	2,816	Rough	Do.
37G	41.06	do		12x20	6	6	720	Rough	Do.
37H	41.06	do		12x20	9	6	1,080	Rough	Do.
37I	41.06	do		12x20	10	10	3,300	Rough	Do.
37J	41.06	do		12x20	11	10	2,200	Rough	Do.
37K	41.06	do		12x20	12	14	3,360	Rough	Do.
37L	41.06	do		12x20	14	8	2,240	Rough	Do.
37M	44.06	do		12x20	22	8	3,520	Rough	Do.
38A	36.20	do		12x18	8	8	1,152	Rough	Do.
38B	36.20	do		12x18	9	12	1,944	Rough	Do.
38C	36.20	do		12x18	10	18	3,240	Rough	Do.
38D	36.20	do		12x18	11	10	1,980	Rough	Do.
38E	36.20	do		12x18	12	32	6,912	Rough	Do.
38F	39.20	do		12x18	13	8	1,872	Rough	Do.
38G	39.20	do		12x18	14	10	2,520	Rough	Do.
38H	39.20	do		12x18	15	62	16,740	Rough	Do.
38I	39.20	do		12x18	16	20	5,760	Rough	Do.
38J	39.20	do		12x18	18	8	2,592	Rough	Do.
38K	41.20	do		12x18	22	6	2,376	Rough	Do.
39A	31.93	do		12x16	6	6	576	Rough	Do.
39B	31.93	do		12x16	11	10	1,760	Rough	Do.
39C	31.93	do		12x16	12	20	3,840	Rough	Do.
39D	31.93	do		12x16	16	8	2,048	Rough	Do.

Timber schedule for standard wood steamship—Gulf and Atlantic coast—Continued.

Item.	Item prices.	Part.	Net size.	Gross size.	Linear feet.	Length.	Number of pieces.	Gross footage.	Finish.	Species and grade.
			Inches.	*Inches.*		*Feet.*		*Ft. b. m.*		
39E	$31.93	Frames		12x16		18	14	4,032	Rough	Long leaf yellow pine, dense merchantable (see rule 19).
39F	36.00	do		12x16		23	8	2,944	Rough	Do.
39G	38.31	do		12x16		30	8	3,840	Rough	Do.
39H	40.31	do		12x16		32	10	5,120	Rough	Do.
39I	41.31	do		12x16		33	78	41,184	Rough	Do.
39J	27.36	do		12x14		8	6	672	Rough	Do.
39K	27.36	do		12x14		14	8	1,568	Rough	Do.
39L	27.36	do		12x14		17	16	3,808	Rough	Do.
39M	27.36	do		12x14		18	16	4,032	Rough	Do.
39N	27.36	do		12x14		20	8	2,240	Rough	Do.
39O	31.50	do		12x14		22	6	1,848	Rough	Do.
39P	31.50	do		12x14		23	8	2,576	Rough	Do.
39Q	35.58	do		12x14		30	8	3,360	Rough	Do.
39R	35.58	do		12x14		32	10	4,480	Rough	Do.
39S	35.58	do		12x14		33	78	36,036	Rough	Do.
40A	24.63	do		12x12		6	8	576	Rough	Do.
40B	24.63	do		12x12		12	16	2,304	Rough	Do.
40C	24.63	do		12x12		16	134	25,724	Rough	Do.
40D	25.63	do		12x12		18	8	1,728	Rough	Do.
40E	24.63	do		10x12		10	54	5,400	Rough	Do.
41	36.50	Upper deck beams		12x16		26	2	832	Rough	Do.

42	36.50	.....do.....	.....	12x16	.....	26	2	832	Rough	Do.
43	43.80	.....do.....	.....	12x18	.....	30	1	540	Rough	Do.
44	45.62	.....do.....	.....	12x18	.....	32	2	1,152	Rough	Do.
45	45.62	.....do.....	.....	12x18	.....	32	2	1,152	Rough	Do.
46	50.19	.....do.....	.....	12x18	.....	34	2	1,224	Rough	Do.
47	50.19	.....do.....	.....	12x18	.....	36	2	1,296	Rough	Do.
48	50.19	.....do.....	.....	12x18	.....	36	2	1,296	Rough	Do.
49	54.75	.....do.....	.....	12x18	.....	38	2	1,368	Rough	Do.
50	54.75	.....do.....	.....	12x18	.....	40	3	2,160	Rough	Do.
51	54.75	.....do.....	.....	12x18	.....	40	2	1,440	Rough	Do.
52	59.31	.....do.....	.....	12x18	.....	44	40	31,680	Rough	Do.
53	.....	(Omitted.)								
54	31.94	Upper deck short beams.	.....	12x16	.....	16	66	16,896	Rough	Do.
55	.....	(Omitted.)								
56	35.59	Bilge ceiling.....	.....	12x14	3,000	24 to 40 av., 32	.....	42,000	Rough	Do.
57	42.89	Shelf timbers.....	$11\frac{3}{4}$x$13\frac{3}{4}$	12x14	700	30 to 50 av., 40	.....	9,800	S4S...	Do.
58	.....	(Omitted.)								
59	24.64	Stanchions.....	.....	12x12	.....	10	15	1,800	Rough	Do.
60	.....	(Omitted.)								
61	24.64	Stanchions.....	.....	12x12	.....	14	15	2,520	Rough	Do.
62	24.64	Girder timbers and hatch coamings.	$11\frac{3}{4}$x$11\frac{3}{4}$	12x12	.....	16	8	1,536	S4S...	Do.
63	27.37	Stanchions.....	.....	12x12	.....	24	36	10,368	Rough	Do.
64	32.85	Girder timbers and hatch coamings.	$11\frac{3}{4}$x$11\frac{3}{4}$	12x12	500	24 to 40 av.,32	.....	6,000	S4S...	Do.
65	40.15	Shelf timbers	$11\frac{3}{4}$x$11\frac{3}{4}$	12x12	1,800	30 to 50 av.,40	.....	21,600	S4S...	Do.
66A	24.63	Cant frames.....	.....	10x12	.....	8	36	2,880	Rough	Do.

Timber schedule for standard wood steamship—Gulf and Atlantic coast—Continued.

Item.	Item prices.	Part.	Net size.	Gross size.	Linear feet.	Length.	Number of pieces.	Gross footage.	Finish.	Species and grade.
			Inches.	*Inches.*		*Feet.*		*Ft. b. m.*		
66B	$24.63	Cant frames		10x12		10	32	3,200	Rough	Long leaf yellow pine, dense merchantable (see rule 19).
66C	24.63	....do		10x12		12	16	1,920	Rough	Do.
67A	77.55	....do		10x24		8	18	2,880	Rough	Do.
67B	77.55	....do		10x24		9	6	1,080	Rough	Do.
67C	77.55	....do		10x24		12	4	960	Rough	Do.
68	31.94	Engine bed floors		12x16		18	20	5,760	Rough	Do.
69	41.06	Planking, garboards	9¾x13¾	10x14		40	14	6,533	S1S2E	Long leaf yellow pine (square edged), dense merchantable (see rule 20).
70	41.97	Girder keelsons	9¾x13¾	10x14		45	12	6,300	S4S	Long leaf yellow pine, dense merchantable.
71	26.46	Hatch strongbacks	9¾x11¾	10x12		17	4	680	S4S	Do.
72	24.64	Headers	9¾x11¾	10x12		20	4	800	S4S	Do.
73	28.29	Hatch strongbacks	9¾x11¾	10x12		21	2	420	S4S	Do.
74	29.20	....do	9¾x11¾	10x12		25	2	500	S4S	Do.
75	32.84	Side ceiling	10 x11¾	10x12	8,000	24 to 40 av., 32	.....	80,000	S2E	Do.

76	40.15	Shelf timbers.....	9¾x11¾	10x12	2,200	30 to 50 av., 40	.....	22,000	S4S	Do.
77	22.81	Girder timbers and hatch coamings.	9¾x9¾	10x10	.....	16	8	1,067	S4S	Do.
78	24.64	.....do.....	9¾x9¾	10x10	.....	24	8	1,600	S4S	Do.
79	36.50	Poop, bridge, and forecastle deck beams.	.....	10x10	.....	45	6	2,250	Rough	Do.
80	91.25	Forecastle and poop deck plank-sheer.	7¾x26	8x26	.....	20	14	4,853	S2S	Do.
81	35.59	Poop, bridge, and forecastle deck plank-sheer.	7¾x13¾	8x14	320	24 to 40 av., 32	.....	2,986	S4S	Do.
82	38.32	Planking, garboards...	7¾x13¾	8x14	560	30 to 40 av., 35	16	5,226	S1S2E	Long leaf yellow pine, dense merchantable (see rule 20).
83	41.97	Girder keelsons.....	7¾x13¾	8x14	.....	45	20	8,400	S4S	Long leaf yellow pine, dense merchantable.
84	32.84	Bulkhead studding...	7¾x11¾	8x12	500	24 to 40 av., 32	.....	4,000	S4S	Do.
85	24.63	.....do.....	11¾x11¾	12x12	.....	20	10	2,400	S4S	Do.
86	.....	(Omitted.)								
87	32.84	Floor ceiling.....	8x11¾	8x12	6,700	24 to 40 av., 32	.....	53,600	S2E	Do.
88	24.64	Sills and plates.....	7¾x9¾	8x10	200	20 to 30 av., 24	.....	1,333	S4S	Do.
89	21.90	Sills.....	7¾x7¾	8x8	.....	20	6	640	S4S	Do.
90	23.72	Poop, bridge, and forecastle deck beams.	6¾x9¾	7x10	.....	17	16	1,587	S4S	Do.
91	24.64	.....do.....	6¾x9¾	7x10	.....	24	8	1,120	S4S	Do.

Timber schedule for standard wood steamship—Gulf and Atlantic coast—Continued.

Item.	Item prices.	Part.	Net size.	Gross size.	Linear feet.	Length.	Number of pieces.	Gross footage.	Finish.	Species and grade.
			Inches.	*Inches.*		*Feet.*		*Ft. b. m.*		
92	$31.94	Poop, bridge, and forecastle deck beams.	6¾x9¾	7x10	.....	38	15	3,325	S4S	Long leaf yellow pine, dense merchantable.
93	36.50	.....do.....	6¾x9¾	7x10	.....	45	18	4,725	S4S	Do.
94	52.92	Planking, main rail...	.....	6x19	500	24 to 40 av., 32	.....	4,750	Rough	Long leaf yellow pine (square edged), dense merchantable.
95	38.32	Planking, garboards...	6x13¾	6¼x14	560	30 to 40 av., 35	16	4,083	S1S2E	Long leaf yellow pine (square edged), dense merchantable (see rule 20).
96	24.64	Sills and plates.....	5¾x9¾	6x10	250	20 to 30 av., 24	.....	1,250	S4S	Long leaf yellow pine, dense merchantable.
97	35.20	Planking, bilge.....	6x9¾	6¼x10	8,000	24 to 40 av., 32	.....	41,667	S1S2E	Long leaf yellow pine (square edged), dense (see rules 3 and 20).
98	32.84	Shaft tunnel.....	9¾x11¾	10x12	1,600	24 to 40 av., 32	.....	16,000	S4S	Long leaf yellow pine, dense merchantable.

99	35.20	Planking, topside.....	6x8¾	6¼x9	8,000	24 to 40 av., 32	.....	37,500	S1S2E	Long leaf yellow pine (square edged), dense (see rules 3 and 20).
100	21.90	Studding.....	5¾x7¾	6x8	.....	8	60	1,920	S4S	Long leaf yellow pine, dense merchantable.
101	22.81	Sills and plates.....	5¾x7¾	6x8	250	20 to 30 av., 24	.....	1,000	S4S	Do.
102	31.00	Poop, bridge, and forecastle decks, lock streak.	.....	6x8	320	24 to 40 av., 32	.....	1,280	Rough	Long leaf yellow pine, dense (see rules 3 and 20).
103	26.00	Poop, bridge, and forecastle decks, shelf.	.....	6x8	320	24 to 40 av., 32	.....	1,280	Rough	Long leaf yellow pine, dense merchantable.
104	21.90	Studding.....	5¾x5¾	6x6	.....	7	40	840	S4S	Do.
105	22.81	Sills and plates.....	5¾x5¾	6x6	200	20 to 30 av., 24	.....	600	S4S	Do.
106	31.00	Planking, bead streak.	6x6	6¼x6¼	360	24 to 40 av., 32	.....	1,173	S4S	Long leaf yellow pine (square edged), dense (see rules 3 and 20).
107	46.50	Planking, bottom and side.	5x13¾	5¼x14	10,000	24 to 40 av., 32	.....	61,252	S1S2E	Do.
108	46.50	Planking, poop, bridge, and forecastle.	5x13¾	5¼x14	400	24 to 40 av., 32	.....	2,450	S1S2E	Do.
109	32.84	Poop, bridge, and forecastle clamps.	4¾x11¾	5x12	1,000	24 to 40 av., 32	.....	5,000	S4S	Long leaf yellow pine, dense merchantable.

Timber schedule for standard wood steamship—Gulf and Atlantic coast—Continued.

Item.	Item prices.	Part.	Net size.	Gross size.	Linear feet.	Length.	Number of pieces.	Gross footage.	Finish.	Species and grade.
			Inches.	*Inches.*		*Feet.*		*Ft.b.m.*		
110	$37.02	Planking, bottom and side.	5x9¾	5¼x10	5,800	24 to 40 av., 32	.....	25,374	S1S2E	Long leaf yellow pine (square edged), dense (see rules 3 and 20).
111	35.20	.....do.....	5x8¾	5¼x9	5,800	24 to 40 av., 32	.....	22,836	S1S2E	Do.
112	34.20	.....do.....	5x7¾	5¼x8	4,000	24 to 40 av., 32	.....	14,002	S1S2E	Do.
113	29.20	Poop, bridge, and forecastle decks, shelf.	4¾x7¾	5x8	650	24 to 40 av., 32	.....	2,166	S4S	Long leaf yellow pine, dense merchantable.
114	22.81	Sills and plates.....	4¾x4¾	5x5	400	20 to 30 av., 24	.....	833	S4S	Do.
115	37.02	Planking, bulwarks...	4x9½	4¼x10	400	24 to 40 av., 32	.....	1,416	S1S2E	Long leaf yellow pine (square edged), dense (see rules 3 and 20).
116	31.02	Shaft tunnel.....	3¾x9¾	4x10	800	24 to 40 av., 32	.....	2,667	S4S	Long leaf yellow pine, dense merchantable.
117	27.37	Ends of erections, bulkheads.	3¾x7¾	4x8	2,000	20 to 40 av., 26	.....	5,333	S4S	Do.

118	36.94	Planking, bulwarks..	4x7½	4¼x8	700	24 to 40 av., 32	.....	1,985	S1S2E	Long leaf yellow pine (square edged), dense (see rules 3 and 20).
119	22.81	Sills and plates.....	3¾x5¾	4x6	350	20 to 30 av., 24	.....	700	S4S	Long leaf yellow pine, dense merchantable.
120	24.64	Studding.....	3¾x3¾	4x4	.....	7	64	597	S4S	Do.
121	27.37	.....do.....	3¾x3¾	4x4	.....	28	60	2,240	S4S	Do.
122	56.50	Upper decking.....	.....	4¼x4¼	42,000	16 and up, av., 26	.....	63,219	Rough	Long leaf yellow pine (square edged), dense (see rule 3).
123	56.50	Decking in way of tanks.	.....	4¼x4¼	2,000	16 and up, av., 26	.....	3,010	Rough	Do.
124	27.37	Hatch covers.....	2¾x7¾ to 15¾	3x8 to 16 av., 12	2,400	14 and up.	.....	7,200	S4S	Long leaf yellow pine, dense merchantable.
125	45.00	Timber for pointers and riders.	3¾x13¾	4x14	1,500	24 to 40 av., 32	.....	7,000	S4S	Do.
126	27.37	Cross spalls.....	.....	3x8	.....	24	400	19,200	Rough	Do.
127A	31.00	Bulkheads.....	2¾x7¾	3x8	4,000	20 to 40 av., 32	.....	8,000	S4S	Long leaf yellow pine (square edged), dense merchantable.
127B	38.20	.....do.....	9¾x11¾	10x12	.....	42	53	22,260	S4S	Long leaf yellow pine dense merchantable.
127C	38.20	.....do.....	9¾x11¾	10x12	.....	40	9	3,600	S4S	Do.
127D	27.36	.....do.....	9¾x11¾	10x12	.....	24	1	240	S4S	Do.

Timber schedule for standard wood steamship—Gulf and Atlantic coast—Continued.

Item.	Item prices.	Part.	Net size.	Gross size.	Linear feet.	Length.	Number of pieces.	Gross footage.	Finish.	Species and grade.
			Inches.	*Inches.*		*Feet.*		*Ft. b. m.*		
127E	$24.63	Bulkheads	9¾x11¾	10x12	.....	20	17	3,400	S4S	Long leaf yellow pine, dense merchantable.
127F	24.63	.....do	9¾x11¾	10x12	.....	18	14	2,520	S4S	Do.
127G	24.63	.....do	9¾x11¾	10x12	.....	16	14	2,240	S4S	Do.
128	27.37	Deck carlings	2¾x5¾	3x6	.....	17	10	255	S4S	Do.
129	27.37	.....do	2¾x5¾	3x6	.....	24	56	2,016	S4S	Do.
130	36.50	Bridge, poop, and forecastle ceiling.	2¾x5¾	3x6	2,000	20 to 40 av., 30	.....	3,000	S4S	Long leaf yellow pine (square edged), dense merchantable.
131	27.37	Upper house carlings	2¾x4¾	3x5	.....	20	60	1,500	S4S	Long leaf yellow pine, dense merchantable.
132	27.37	Sills and plates	2¾x4¾	3x5	100	20 to 30 av., 24	.....	125	S4S	Do.
133	27.37	Pilot-house carlings	2¾x3¾	3x4	.....	16	15	240	S4S	Do.
134A	65.62	Planking, poop, bridge, forecastle, and bulwark.	3½x7½	4x8	600	24 to 40 av., 32	.....	1,600	S4S	Long leaf yellow pine (square edged), dense (see rule 3).
134B	65.62	.....do	3½x6½	4x7	814	24 to 40 av., 32	.....	1,900	S4S	Do.
134C	65.62	.....do	3½x5½	4x6	3,900	24 to 40 av., 32	.....	7,800	S4S	Do.

135	27.37	Studding	$2\frac{3}{4}$x$2\frac{3}{4}$	3x3	.....	7	29	152	S4S	Long leaf yellow pine, dense merchantable.
136	65.62	Poop, bridge, and forecastle decking.	.....	$3\frac{1}{4}$x$3\frac{1}{4}$	28,000	16 and up, av., 26	.....	24,646	Rough	Long leaf yellow pine (square edged), dense (see rule 3).
137	23.72	Engine and boiler hatch planking.	$1\frac{3}{4}$x$5\frac{3}{4}$	2x6	1,800	12 to 24 av., 16	.....	1,800	S4S	Long leaf yellow pine (square edged), dense merchantable.
138	25.72	Bridge house and aft house planking.	$1\frac{3}{4}$x$5\frac{3}{4}$	2x6	4,500	20 to 30 av., 24	.....	4,500	S4S	Do.
139	25.72	Coal chute	$1\frac{3}{4}$x$5\frac{3}{4}$	2x6	450	20 to 30 av., 24	.....	450	S4S	Long leaf yellow pine, dense merchantable.
140	.....	(Omitted.)								
141	30.11	Coal bunkers	$1\frac{5}{16}$x$5\frac{1}{4}$	$1\frac{1}{2}$x6	[1] 4,000	12 and up.	.....	6,768	D.&M.	Long leaf yellow pine, No. 1 common.
142	50.19	House decking	$1\frac{1}{16}$x$3\frac{1}{4}$	$1\frac{1}{4}$x4	[1] 6,000	12 and up.	.....	8,910	S2SCM.	Long leaf yellow pine, A edge grain flooring.
143	36.50	House sheathing, outside.	$\frac{13}{16}$x$5\frac{1}{4}$	1x6	[1] 2,000	12 and up.	.....	2,250	D.&M.	Long leaf yellow pine, A finish.
144	36.50	House sheathing, inside.	$\frac{13}{16}$x$5\frac{1}{4}$	1x6	[1] 6,000	12 and up.	.....	6,750	D.&M.	Do.

[1] Square feet.

Total gross footage of yellow pine 1,544,107

Timber schedule for standard wood steamship—Gulf and Atlantic coast—Continued.

Item.	Item prices.	Part.	Net size.	Gross size.	Linear feet.	Length.	Number of pieces.	Gross footage.	Finish.	Species and grade.
			Inches.	*Inches.*		*Feet.*		*Ft. b. m.*		
145	.....	Rudder stock	.....	20x20	.....	30	1	1,000	Rough	White oak, all heart, highest structural grade.
146	.....	Rudder post	.....	16x18	.....	34	1	816	Rough	White oak, selected structural.
147	.....	Sternpost	.....	14x20	.....	30	4	2,800	Rough	Do.
148	.....	Shaft log	.....	14x18	.....	12	4	1,008	Rough	Do.
149	.....	Horn timbers	.....	12x24	.....	34	2	1,632	Rough	Do.
150	.....	Forecastle and poop deck chock rails.	.....	6x8	180	12 and up.	.....	720	Rough	Do.
151	.....	Keel shoe	.....	3x16	.....	20	14	1,120	Rough	Do.
152	.....	Stem grips	.....	16x36	.....	11	1	528	Rough	Do.

Total gross footage of white oak 9,624

Item.	Item prices.	Part.	Net size.	Gross size.	Linear feet.	Length.	Number of pieces.	Gross footage.	Finish.	Species and grade.
			Inches.	*Inches.*		*Feet.*		*Ft. b. m.*		
153 to 158	.....	Knees. (See detail plan of knees with schedule accompanying the sketches of the knees.)	.....	.....	.....	.....	.....	.....	.....	Hackmatack or tamarack, white oak, live oak, cypress, spruce, white cedar, western red cedar, Douglas fir, high-grade juniper.
		Treenails.....	.....	.....	.....	.....	.....	.....	.....	Black or yellow locust, iron bark, bois de arc, or live oak.

The number, diameter, and length of treenails are to be in accordance with detail construction and fastening plans. The American Bureau of Shipping or their local surveyors should be consulted as to the necessary finished diameters of the different treenails, some of which will have to be tapered or made in two drifts.

Mold material: 4,000 linear feet of white pine or select common cypress, 1 by 12 inches, in lengths of 14 to 16 feet, surfaced two sides.

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